# Best Practice Message

## October 2025

## Glucagon-Like Peptide-1 Receptor Agonists (GLP-1 RA) for weight management

***Practice changing moments***

- Pharmacological interventions for weight loss may be considered only after dietary, exercise and behavioural approaches have been initiated. GLP-1 RA can be considered for weight loss in individuals with a body mass index (BMI) of 30 kg/m$^2$ or more, or for those with a BMI of 27–30 kg/m$^2$ in the presence of at least one weight-related comorbidity.
- GI adverse reactions are the most frequent side effect of GLP-1 RA. Patients should receive counselling on strategies to minimise GI adverse effects and how to avoid severe dehydration.
- See appendix 1 for a comparison chart of GLP-1 RA for weight loss.

### Background

Glucagon-like peptide-1 receptor agonists (GLP-1 RA) were originally developed to treat type 2 diabetes. Their effectiveness in promoting weight loss was later recognised, and they are now also prescribed for weight management. These medicines are used alongside a reduced-calorie diet and increased physical activity. They are indicated in individuals with a body mass index (BMI) of 30 kg/m$^2$ or more, or for those with a BMI of 27–30 kg/m$^2$ in the presence of at least one weight-related comorbidity (pre-diabetes, type 2 diabetes mellitus, hypertension, dyslipidaemia, or obstructive sleep apnoea).[1] These agents enhance insulin secretion, suppress glucagon release, slow gastric emptying, and promote satiety.[1]

In Aotearoa, the only funded (available under Special Authority) GLP-1 RA are for diabetes management:

- Dulaglutide (Trulicity®)
- Liraglutide (Victoza®)

Medsafe has approved GLP-1 RAs for weight loss, but these are not publicly funded. Both products currently available in Aotearoa cost around $400-$600 per month:[2]

- Liraglutide (Saxenda®)
- Semaglutide (Wegovy®)

For weight management, dosing is generally higher than that used for glycaemic control and the extent of weight loss is dose dependent.[3]

In addition to their primary benefits in blood glucose regulation and weight reduction, GLP-1 RA have demonstrated cardiovascular protective effects,[4–7] potential in heart failure management,[8,9] as well as reducing mortality from renal disease progression.[10]

### Adverse reactions and considerations

Gastro-intestinal (GI) side effects such nausea, vomiting, constipation, loss of appetite, and reflux are common to all GLP-1 RA:

- GI effects are dose dependent and doses should be titrated slowly over weeks until the maintenance dose is achieved to reduce GI effects.[11] Consider pausing dose escalation or reducing the dose if significant side effects occur.
- GI effects are usually transient and improve with continued therapy.
- Recommend small meals including a balanced diet with fibre and protein intake. Avoid rich or spicy foods.
- GLP-1 RA should be avoided in gastroparesis or inflammatory bowel disorders.[11]
- Severe dehydration following gastrointestinal adverse reactions has been reported. [7,12]

Dehydration can lead to a deterioration of renal function.[10,13]

- Assess renal function before starting treatment.

- Patients should be advised to stay well hydrated, see Glucagon-like peptide receptor agonists: stay hydrated Prescriber Update, June 2025.
- Administration may need to be delayed if acute gastrointestinal illness is present on the day that the dose is due.[10] See below for advice around missed doses.
- Consider other medications that may need to be paused while the patient is experiencing vomiting or diarrhoea. See here for more details.

GLP-1 RA rarely causes acute pancreatitis. Patients should be monitored for signs and symptoms of pancreatitis, gallbladder disease, and compressive symptoms of medullary thyroid cancer. [11]

GLP-1 RA do not directly cause hypoglycaemia. However, when used alongside insulin or sulfonylureas, the risk of hypoglycaemia increases. Depending on diabetes control, it may be necessary to reduce the dose of the insulin or sulfonylurea.[10]

GLP-1 RA should not be used in combination with DPP-4 inhibitors such as vildagliptin because there is limited additional benefit for diabetes control, and adverse effects may be increased. [10]

## Missed doses

***Recommendations for resuming GLP -1 RA after missed doses are:***[14]

| | |
|---|---|
| Dulaglutide | • ≤ 4 days after the missed: administer as soon as possible.<br>• >4 days after missed dose: skip the missed dose and administer on the next scheduled day. |
| Liraglutide | • If dose is missed, resume with the next scheduled dose. |
| Semaglutide | • ≤ 5 days after the missed dose: administer as soon as possible.<br>• >5 days after missed dose: skip the dose and administer on the next scheduled day. |

## Dosing strategies

There is a substantial evidence base demonstrating that when obesity management medications are withdrawn, most people experience weight gain. At an average cost of $500 per month GLP-1 RA are relatively costly medication. A recent case study suggests that while weekly dosing regimens lead to greater initial weight loss substantial long-term weight loss maintenance might still be achieved with reduced dosing frequencies. [15]

## Switching between GLP-1 RA

As newer agents become available patients may consider switching to a different GLP-1 RA. When transitioning a patient from liraglutide to semaglutide, a cautious approach is advised. Starting semaglutide at a comparatively lower dose helps minimise gastrointestinal side effects during the switch. No wash-out period is needed, semaglutide can be initiated the day after liraglutide is discontinued.

***Table of comparative GLP-1 RA doses:***[14,16–18]

| Dulaglutide | Liraglutide | Semaglutide | Tirzepatide |
|---|---|---|---|
| | 0.6mg/day | | |
| 0.75 mg/week | 1.2mg/day | 0.25mg/week | |
| 1.5mg – 3mg/week | 1.8mg/day | 0.5mg/week | 2.5mg/week |
| 4.5mg/week | 2.4mg/day | 1mg/week | 5 mg/week |
| | 3mg/day | 1.7 – 2.4mg/week | 5mg/week |
| | | | 7.5mg/week |
| | | | 10-15mg/week |

## Looking to the future

Tirzepatide is a long-acting agent with dual action antagonising glucose-dependent insulinotropic polypeptide (GIP) and GLP-1 receptors. A 2025 trial compared maximum tolerated dose of tirzepatide (10 mg or 15 mg) or the maximum tolerated dose of semaglutide (1.7 mg or 2.4 mg) subcutaneously once weekly for 72 weeks. Tirzepatide showed a

20% weight reduction compared to 14% weight reduction with semaglutide.[19] Tirzepatide is not currently available in Aotearoa, but Medsafe are reviewing an application for it to be registered here.

A recent trial looked at using higher than currently approved doses of semaglutide. The 7.2mg dose used in the trial produced an average of 18.7% body weight loss. While gastrointestinal adverse effects were more common in the 7.2mg vs 2.4mg dose, there was no increase seen in serious adverse effects.[20]

Oral semaglutide has been approved by the U.S Food and Drug administration and available in many countries, however, is not currently available in Aotearoa.

**Tools and further reading:**

- As with any medicine, any adverse reaction should be reported to CARM.

- **New Zealand Formulary:** GLP-1 receptor agonists.
- **Health Hawkes Bay Best Practice:** Dulaglutide and liraglutide in diabetes management
  Managing medicines during sick days
- **Goodfellow Unit**: Dr James Shand: The latest in weight management for New Zealand
- **Research Review:** A summary of GPCME 2025 Rotorua: The Obesity Dialogue
- **Pharmacy Today:** More information on pharmacists supply of Wegovy
- **BMJ Best Practice:** Obesity in adults: Treatment algorithm
  (free access via the Health Pathways landing page)
- **Novo Nordisk:** Wegovy prescriber guide

**Patient resource:**

- **Healthify:** Weight loss medicines
  Wegovy

**Authored by:** Riani Albertyn **Reviewed by:** Brendan Duck
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## Appendix 1: Comparison of GLP-1 RA for weight loss

| | Liraglutide (Saxenda®) | Semaglutide (Wegovy®) | Tirzepatide (Mounjaro®) |
|---|---|---|---|
| **Other notes** | | | Not yet Medsafe approved |
| **Device** | • Pre-filled pen.<br>• Doses are dialled up.<br>• One dose strength available. | • Pre-filled pen.<br>• Each pen contains 4 doses of medicine already loaded.<br>• 5 different dose strengths pens. | • Pre-filled pen.<br>• Each pen contains 4 doses of medicine already loaded. Several strengths currently awaiting Medsafe approval. |
| **Needles** | Not included. Designed to be used with NovoFine® needles of up to 8 mm long. | Each pen comes in a pack with 4 needles. | |
| **Initial Dose** | 0.6 mg once **daily.** | 0.25 mg once **weekly.** | 2.5 mg **weekly.** |
| **Dose increase intervals** | Weekly. | Every 4 weeks. | Every 4 weeks. |
| **Titration doses** | Increase dose in increments of 0.6 mg. | 0.25 mg, then 0.5 mg ,then 1 mg, then 1.7 mg, then 2.4 mg. | Increase dose in increments of 2.5 mg.[3] |
| **Usual maintenance dose** | 3 mg daily. | 2.4 mg once weekly. | 15 mg once weekly. |
| **Average weight loss** | Based on trials conducted in specialist settings which included lifestyle interventions– may not be directly applicable to the primary care setting. Patients with a BMI ≥ 30 kg/m$^2$ or ≥27 kg/m$^2$ with a weight-related comorbid condition: | | |
| | **8%** of body weight over 56 weeks (3 mg).[21] | **14.9%** of body weight after 68 weeks (2.4 mg). [22] | **22.5%** of body weight after 72 weeks (15 mg).[23] |
| **Storage pre-use** | Store in fridge; do not freeze | | |
| **Shelf life out of fridge/ once in use.** | Up to a month. | Up to a month. | Up to a month. |

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